Panel: Aeromedical Lessons Learned from the Space Shuttle Columbia Accident Investigation – Update 2011

Title: Medical Response, Search and Recovery during the Space Shuttle Columbia Accident Investigation

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Introduction: On February 1, 2003, the Space Shuttle Columbia broke apart during atmospheric re-entry on mission STS-107. After an event such as this, with high visibility and international interest, the operational challenge of recovering the crewmembers could not be underestimated.

The Space Shuttle Program is organized to respond to a vehicle mishap using the resources of the Mishap Investigation Team (MIT). On the afternoon of Feb. 1, 2003, the MIT deployed to Barksdale Air Force Base (AFB), Louisiana. This location became the investigative center and interim storage location for crewmembers received from the Lufkin, Texas Disaster Field Office (DFO).

The Lufkin DFO served as the primary area for all operations, including staging assets and deploying field teams for search, recovery and security of crewmember remains. More than 2,000 people from numerous organizations were involved with the recovery of the crew. All seven crewmembers of STS-107 were recovered and ceremonial last rights were administered. Astronaut and military personnel escorted the crew with honor to the MIT at Barksdale AFB, Louisiana.

At Barksdale AFB a temporary morgue was established in an aircraft hangar and operated for approximately two weeks during which time coordination with the DFO field recovery teams, Armed Forces Institute of Pathology (AFIP) medical personnel, and the crew surgeons was on going. Families of crewmembers and NASA management were notified daily of the current findings. Working under the leadership of the MIT Lead, the medical team developed and executed a short-term plan to identify and relocate the crew with a military honor guard and protocol to the medical examiner at the Armed Forces Port Mortuary, Dover AFB, Delaware.

After operations at Barksdale AFB were concluded the medical team transitioned back to Houston and a long-term plan was developed and implemented which involved the Air Force Mortuary Affairs at Randolph AFB, Texas. This plan was coordinated with search teams in the field, Barksdale AFB Mortuary Affairs, KSC security, AFIP, and the crew surgeons at JSC.

Educational Objectives: Understand the overall medical response, search and support provided by the Mishap Investigation Team at Barksdale AFB, Louisiana and the Disaster

Field Office at Lufkin, Texas during the recovery of the Space Shuttle Columbia crewmembers.